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ABSTRACT

The Florida Assessment and Diffusion System (FADS) represents a systematic approach to organizational change, emphasizing the interpersonal communication dimension of the change process. FADS encourages a systems approach to change, but is flexible enough to allow for procedural changes in response to specific user needs. The model assumes a client centered decision-making process which is facilitated by a highly skilled individual or group referred to as an agent. The major components of FADS are initiation, verification, problem solving, diffusion, evaluation, and documentation. Each of these components is based on a series of operationally related elements. For each element, process and output statements are provided. Finally, FADS attempts to redefine the concept of diffusion to incorporate both pre- and post-adoption decision-making in an interpersonal, client-oriented system. (Author/KS)

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A SYSTEMS MODEL FOR ASSESSMENT AND DIFFUSION

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A paper presented at
the Annual Convention of the
International Communication Association

Chicago, Illinois

April, 1975

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ACKNOWLEDGEMENTS

This document constitutes the final report of a pair of projects conducted during the latter half of 1974 at Florida State University under the sponsorship of the Florida Research and Development Program. These integrated projects undertook a synthesis of needs assessment and diffusion strategies to create a model for impacting the conduct of teacher education by matching educational research products to practitioner needs.

We gratefully acknowledge the significant contributions of members of the design team. In addition to those listed as authors, special thanks go: to Professor John Hansen of the College of Education for process documentation assistance and general critique; to Professor Dick Lee of the Florida State University Department of Communication for extensive editorial revision of previous drafts; and to Barbara Fulghum, Carmen Siri, Sue Freedman, Barry James, James Becker, Camille Ashcraft, Annie Johnson and William Todd for research, critique, and simulation participation.

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The Authors

March 1, 1975

"A SYSTEMS MODEL FOR ASSESSMENT AND DIFFUSION"

Kevin Toomb, Robert Kibler, Norman Dodl,
Walter Dick, Stephen Rollin

(Annual Convention of the International Communication Association, Chicago, Illinois 1975)

ABSTRACT

The Florida Assessment and Diffusion System (FADS) represents a systematic approach to organizational change which emphasizes the interpersonal communication dimension of the change process. FADS encourages a careful, systems oriented approach to change, but is flexible enough to allow for procedural changes in response to specific user needs. The FADS model assumes a client centered decision making process which is facilitated by a highly skills individual (or group) referred to as an agent.

The major components of FADS are: Initiation; Verification; Problem Solving; Diffusion; Evaluation and Documentation. Each of these components is based upon a series of operationally related elements. For each individual element (28) Process and Output statements are provided.

FADS is an attempt to redefine the concept of diffusion to incorporate both pre- and post-adoption decision-making in an interpersonal, client-oriented system. A companion paper entitled "A Review and Critical Analysis of the Literature

Pertaining to the Diffusion of Education Innovations" by William Todd, Robert Kibler, Norman Dodl, Walter Dick and Stephen Rollin (Annual Convention of the International Communication Association, Chicago, Illinois; April 1975) provide a summary of the research-based propositions which form the foundation of FADS.

INTRODUCTION

This report represents a conceptual and operational merger of two separate but related projects under contract to Florida State University (FSU). In paraphrased language based on the original "requests for quote" and contracts, FSU was to develop: (1) a system to assess information needs of teacher education decision makers; and (2) two or more impact strategies to increase the probability that teacher educators would make appropriate use of research and development findings and products. The initial investigation into these tasks led to several conclusions:

1. Needs assessment and impact strategies (diffusion) should be conceptualized as one continuous process.

2. A general model of that process is essential prior to the development of specific impact strategies or the design of specific instruments for needs assessment.

3. The entire process must be "client centered", i.e., the probability of impacting on any user system is increased when the object of impact is a "best" solution to a specific needs within a specific user system as identified by a specific client.

4. Specific instruments for needs assessment and specific impact strategies will be useful only as specific applications of a general model of the process as it pertains to a specific client's problem.

Thus, this paper represents a general model for a Florida Assessment/Diffusion System (FADS). Professors Norman Dodl and Walter Dick of the College of Education at FSU served as Project Directors throughout design and development processes.

Development/Diffusion Models

One of the most complete reviews of the development/diffusion models in education was done by Ronald Havelock et al.(1969). In this review, three major models of dissemination/utilization were identified, examined, and reviewed. Each of these models were considered by the research team and a brief note on each would be helpful.

The first of these models, the research/development/diffusion (RR&D) model is based on a rational sequence of activities from research to diffusion. Havelock criticizes

this approach because it is "... excessively research oriented, and inadequately user oriented ..."

The second model reviewed is the social interaction model. This model assumes that research and development is a precondition for the study of the diffusion process. The research in this area stresses the importance of personal relationships and the social relations network, and acknowledges the relatively minor role of mass media in affecting dissemination to a passive audience. Havelock cites the neglect of the information flow within the organizational structure, and the apparent failure to relate adoption decisions to internal processes (i.e., attitude change) as the primary shortcomings of the research in this model.

Finally, the problem solver model is presented. This model assumes that the user is an active solution seeker. This systems-like model places a great deal of emphasis on a realistic, rational program of identifying the user's needs. Havelock suggests that the weak points of this model are the over-burdening of user resources, and the neglect of the role of outside agencies.

In response to the weaknesses of these three models, Havelock presents his own model, based on the strong points of each of the others. This linkage model focuses on the user as a skillful problem solver who utilizes a systematic and rational process in finding his solutions. While this model does provide a better system of development, the critical issues of accurate need assessment, diffusion evaluation, and user competence are not addressed.

In summary, the Havelock review suggests that none of the traditional models of educational diffusion cope with the critical issues faced by educational decision makers. In the design of the FADS Model, the research team attempted to remedy the shortcomings found in the preceding models.

Process Assumptions

The FADS Model presents a unique alternative to the generally accepted use of assessment and diffusion. This alternative approach offers the client several departures from and advantages over traditional models. In order to fully realize the advantages and appreciate the departures, a set of process assumptions must be stipulated.

The following constitute the basic assumptions relevant to the process of the FADS Model.

1. The agent team must have a high degree of technical and interpersonal skills in order to best serve the client.

2. During the process of implementing the FADS Model, the client is the ultimate decision-maker.

3. Constant client/agent interaction which facilitates cooperation is a key element in determining the success of the Model.

4. Long-term change is a necessity for many systems and social institutions, and the FADS Model is primarily designed to facilitate such change. However, it may also be adaptable to short-term problem solving.

5. The agent and client must agree on the problem and its pursuit, i.e., it is our problem.

6. Agreement to initiate or to continue using the FADS Model is negotiated at key points in the process of implementing the Model.

7. Either the client or the agent can, by negotiation or written prior agreement, terminate the implementation of the FADS Model.

8. At all points in the Model, conclusion and action suggestions made by the agent to the client should demonstrate a concern for and a relationship to the client's perceived problems.

9. The agent is accountable to the client for both the effectiveness and the efficiency of the implementation of the FADS Model.

Advantages of the FADS Model

There are several advantages to be realized by both the user community and the agent with the implementation of the FADS Model. Some of the more significant advantages are mentioned below:

1. The FADS Model provides for a high level of face to face contact among agents, users, and target population. This interaction should lead to greater communication integration, and therefore a reduction in those system errors which are caused by inefficient communication networks and message misinterpretation.

2. The FADS Model is flexible enough to allow for procedural changes in response to specific user needs.

3. FADS encourages a careful, systems-oriented approach to decision making.

4. The FADS approach provides for the evaluation of the diffusion process based on its efficiency and

effectiveness, as well as its consequences to the user population.

5. The FADS Model is applicable to both large and small size adoption units.

6. FADS encourages advance commitment to predetermined goals as a precondition for research and development.

7. FADS provides for a multi-organizational approach to solving the problems facing educators.

Departures from Traditional Diffusion Theory

The FADS Model presents several departures from the authority decision-making model of diffusion presented by Rogers and Shoemaker (1971). Perhaps the most striking difference is the cyclic nature of the diffusion process when seen through the FADS approach. At a number of different points the user must be acquainted with the range of options open to him (knowledge), and then be guided to select those options that are best for him (persuasion/decision). This process occurs in the Verification, Problem Solving and Diffusion components of the Model.

The somewhat extensive verification-problem solving components of the Model present the agent with a more complex pre-diffusion decision making procedure than that identified by Rogers & Shoemaker. However, it is here, in the determination of the users' needs, that many diffusion (impact) strategies fail. The agent realizes too late that the innovation selected is not relevant to the perceived needs of the user community. The gap between need and solution (innovation) is reduced by the FADS Model through its emphasis on systematic needs assessment, and rational problem solving.

In traditional diffusion theory, the persuasion function provides for the development of a predisposition to adopt a solution or innovation. Implied in this function is the assumption that clients will have the necessary skills needed to implement the solution, or that they will develop those skills before implementation. However, this is not always the case. The FADS Model includes an element which provides for an Action program. This Action program will normally be a training program designed and implemented (or supervised) by the agent team to improve the probability that the members of the target population will have the skills necessary to implement the client selected solutions. To the extent that the Action element calls for needs other than training, the agent will design, implement, and/or supervise the necessary procedures to maximize effective adoption of the selected solutions.

The agent can never be totally sure that the strategies used in one diffusion situation will be appropriate in a second situation. The FADS Model provides for the field testing of the Information Delivery, Persuasion, and Action programs. The results of this field testing are then used to guide the agent through any restructuring.

The evaluation process suggested by this Model incorporates feedback to the user regarding the consequences the innovation has brought upon the system, and the effectiveness and efficiency of the diffusion process itself. Not only does the Model provide for a summary evaluation report, but it stipulates a series of formative evaluations to be taken periodically in the diffusion component. These evaluations fall into two broad categories. First, each of the Information Delivery, Persuasion and Action programs are formatively evaluated on the basis of their individual efficiency and effectiveness. Second, these three elements are evaluated as an aggregate strategy in element 23 (Implement initial (formative) evaluation). It is here that the initial rate of adoption is assessed. This information is then used to redesign the three preceding elements; and more significantly, to serve as input in designing the Reinforcement Program for Initial Adoption (Element 24).

In order to provide for greater information distribution among diffusion scholars and practitioners, provisions in the Model are made for documenting each FADS application and the effectiveness of the selected solutions to specific problems. This documentation serves as a basis for state-wide and national dissemination through appropriate storage and retrieval systems (e.g. - ERIC) and/or normal journal publication. This dissemination process is intended to contribute to the enlargement of the data base available to change agents, researchers, decision makers, and interested scholars whose future success is often dependent upon well documented instances related to their efforts.

Finally, the FADS approach provides for branching alternatives to the generally accepted diffusion process. By evaluating his position at several points in the Model, and selecting the options that are best for him, the user is insured of an assessment/development/diffusion program that is tailored to his needs.

Basis for Model Revision

To adequately "test out" the FADS Model would take many months of concentrated work with a variety of user systems, each possessing a number of different problems. Prior to this rigorous testing program, the research team felt that intense discussion with potential users, and subsequent simulations would provide some important information.

The FADS Model was discussed with personnel within each of the following:

1. Department of Education - Division of Elementary and Secondary Education, Personnel Development Staff.

2. Department of Education - Division of Vocational, Technical and Adult Education, Bureau of Research and Evaluation.

3. Department of Administration - Division of State Planning, Bureau of Criminal Justice Planning and Assistance.

4. Leon County Teacher Education Advisory Council.

In each instance, a leader or leaders within the group were contacted by a member or members of the FADS design team. At least one discussion was held in each instance; in two cases, a series of meetings were held to describe the various components of the FADS Model, to ascertain the extent to which the intent and process of these components were applicable to needs as perceived by the contacted client, and to secure suggestions for Model revision.

Subsequently, the design staff simulated two major try outs of the Model. The first was an "in house" attempt, and the second was completed with the Bureau of Criminal Justice Planning and Assistance in the Florida Department of Administration.

These simulations confirmed many initial design considerations and decisions made during the process of developing the Model. It also facilitated the clarification of certain elements of the Model. It especially clarified the need for additional check points between agent and client; and dramatically pointed up the need for agent consultation with the target population at critical stages in the process. All of these clarifications are reflected in the detailed description of each Model element in the subsequent pages of this report.

In general, the process worked well as designed. Confirmed, for example, was a team decision to avoid use of generalized instruments for needs assessment as an initial basis for agent-client work. The early elements in the Model are necessarily highly interactive, and must be very carefully conducted by trained agents who exhibit a high level of consultative skill to gain early credibility, early agent-client rapport, and to elicit and maintain a high degree of client "ownership" for the process. Thus, instrumentation for needs assessment now appears to be situation and client specific and may have to be generated as the process unfolds. After several additional simulations have been held, it may be

possible to predict certain information needs and to some extent empirically derive formats for assessment. This was not possible, however, within the project design period.

Another team expectation which was confirmed by the simulation was the time commitment necessary to utilize FADS in its present form. The Model assumes that posing solutions to verified needs is only a part of the process. To take on the diffusion responsibility defined as ensuring maximum adoption of the solution by the target population requires many carefully executed pre-diffusion client and target population readiness steps. Without these, the likelihood of adoption is greatly reduced. While system change is a reasonable outcome of full participation with FADS, immediate change should not be expected.

Format of the Report

The format of the majority of this report is in the nature of an outline. This seemed to be the most effective manner in which to present the explanation of the FADS Model. No effort has been made to completely integrate, in a narrative fashion, all dimensions of the report.

The basic substance of this report includes: (1) a Glossary developed to aid the reader in the study of the FADS Model; (2) a graphic display of the FADS Model; (3) an element by element description of the Model which outlines the processes and products (outputs) of each element. Not included, but available upon request from the authors, are the input statements for each of the elements. The cost of including these lengthy statements was judged to be prohibitive.

NOTE: The parallel, element by element review of the literature which includes principles and generalizations used in the development of the Model is being presented on a program sponsored by the Instructional Division. The paper is entitled "A review and critical analysis of the literature pertaining to diffusion of innovation in education." by William R. Todd, Robert J. Kibler, Norman Dodl, Walter Dick, and Stephen Rollin, Florida State University.

GLOSSARY

AGENT - that individual or group that implements the processes called for in each element of the assessment/diffusion model.

ASSESSMENT POPULATION - that sub-set of an organization, agency, or user system from which information must be collected: (1) to verify present and ideal status; (2) to make a systematic analysis of need; and (3) to ascertain conditions within the total user system which will contribute to or constrain diffusion of a solution.

CLIENT - That individual or small group of individuals who represents the client population in transactions with the assessment/diffusion agent.

CLIENT POPULATION - that sub-set of an organization, agency or user system which seeks out the services of the assessment/diffusion agent for assistance in meeting a perceived user system need.

COMPONENT - that set of elements which comprises a major part of the overall assessment/diffusion model. This model includes five components: (1) Initiation, (2) Verification, (3) Problem Solving, (4) Diffusion, and (5) Evaluation and Documentation.

DIFFUSION - that process by which an innovation is communicated to the members of a relevant social system for the purpose of persuading those members to adopt the innovation. Included in the FADS Model is the evaluation of an innovation's adoption. Innovations are new ideas, procedures, or ways of performing that are typically developed as solutions to problems. Taken collectively, the last thirteen steps of the FADS Model may be identified as a generalized impact strategy.

DISSEMINATION - that process by which information is distributed to individuals or groups by some formal or informal set of procedures.

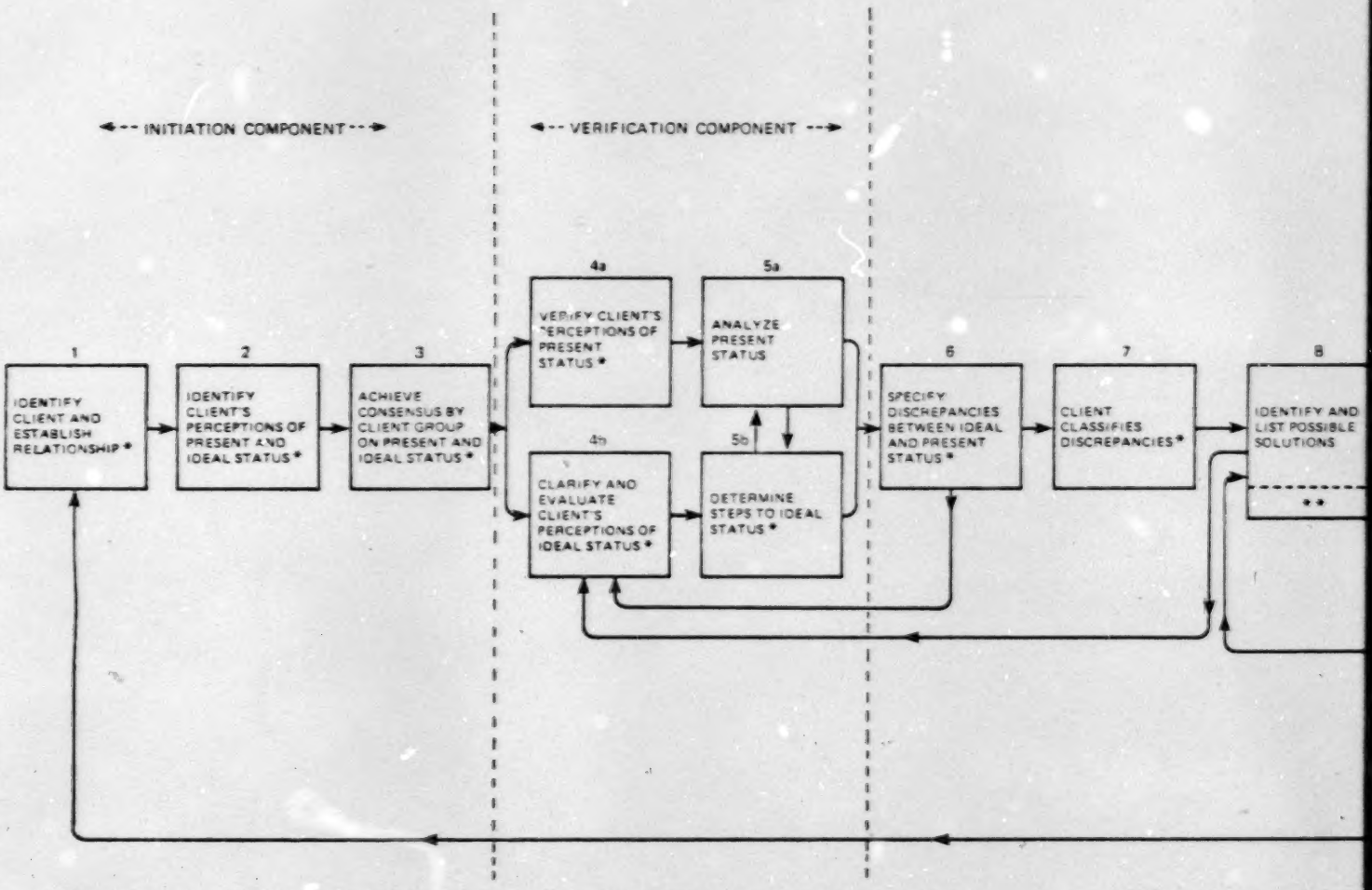
ELEMENT - a specific step in the assessment/diffusion model. Each element is operationally defined by those products required as input, the processes or actions called for, and the products or output which result from these actions.

MODEL(assessment/diffusion) - that set of interrelated components which define the assessment/diffusion process, referred to here as the Florida Assessment/Diffusion System (FADS) Model.

TARGET POPULATION - that sub-set of an organization, agency, or user system which is seen as the target of change, the adopter of an innovation, or ultimate user of a product.

USER SYSTEM - those populations which are operationally related for the purpose of diffusing a solution, product, or innovation. Typically, a user system will be composed of, at least, a client population, and a target population. These are not necessarily mutually exclusive.

THE FLORIDA ASSESSMENT AND DIFFUSION SYSTEM MODEL



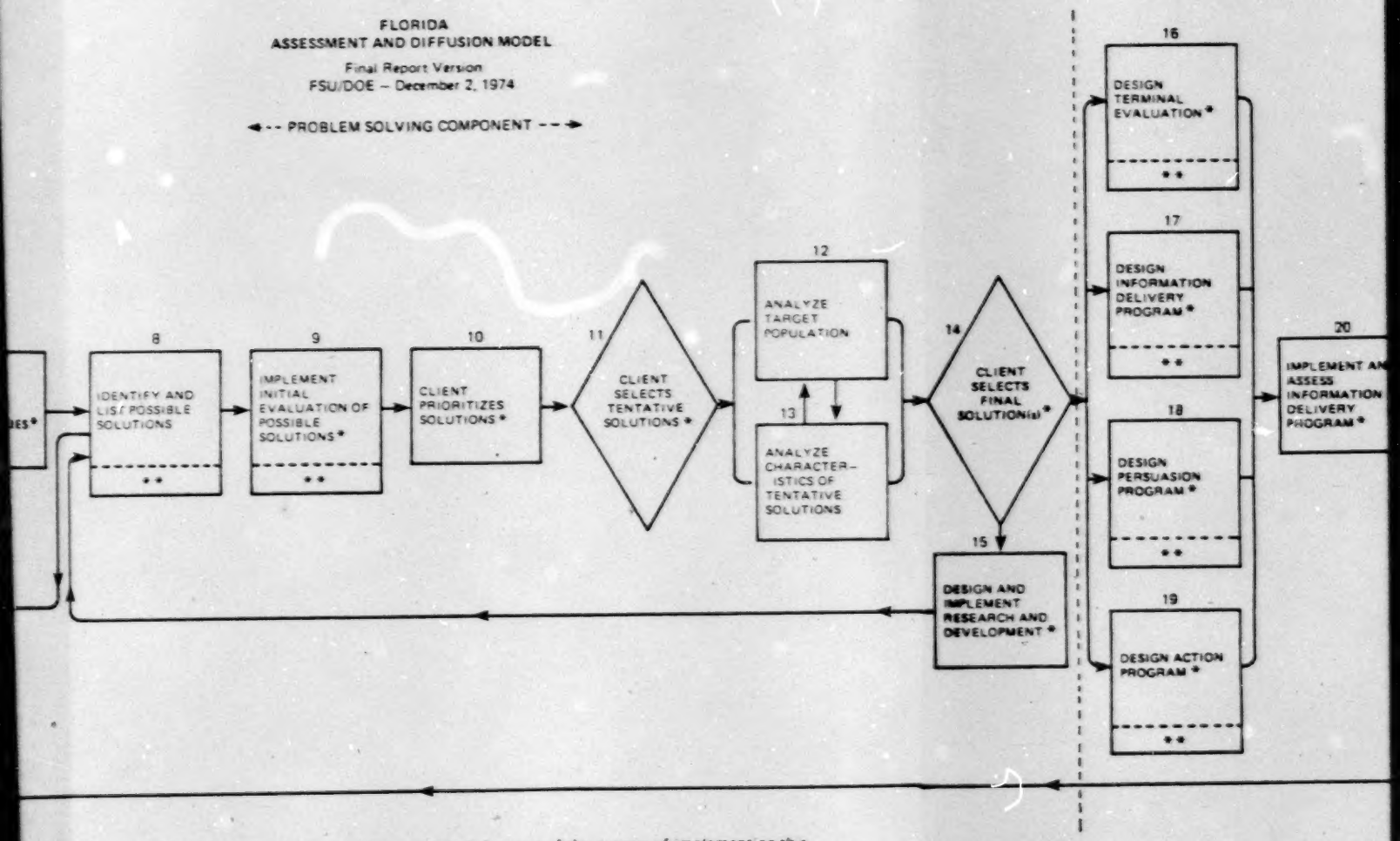
NOTE. – *Some client/agent interaction is demanded as part of the process of implementing this element. See the textual material for the precise nature of those interactions.

NOTE. – **Some agent/target
element. See the te

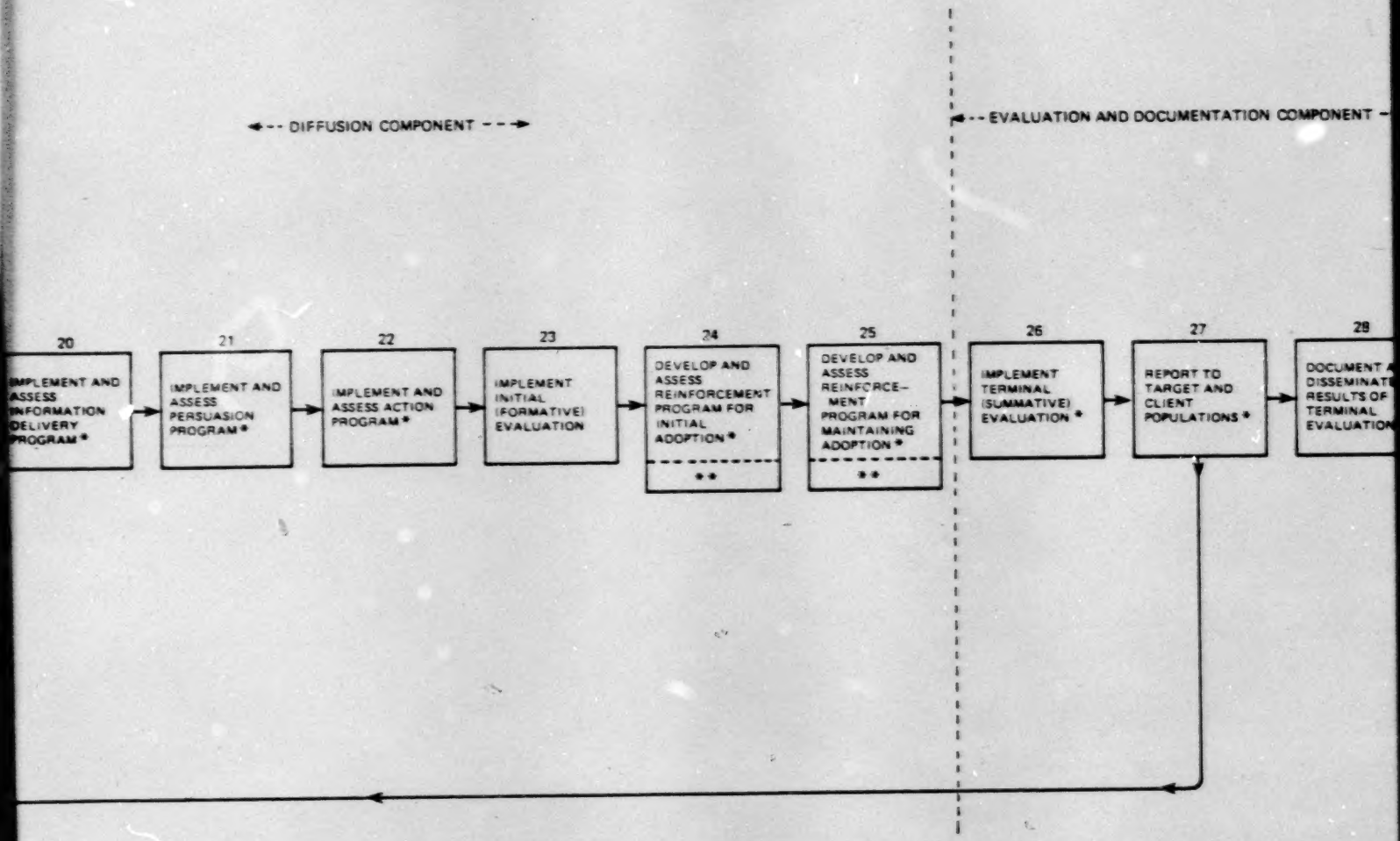
FLORIDA
ASSESSMENT AND DIFFUSION MODEL

Final Report Version
FSU/DOE – December 2, 1974

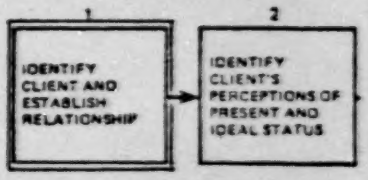
◄-- PROBLEM SOLVING COMPONENT --►



– **Some agent/target population interaction is recommended as part of the process of implementing this element. See the textual material for the precise nature of those interactions.


DIFFUSION COMPONENT
EVALUATION AND DOCUMENTATION COMPONENT
20
IMPLEMENT AND ASSESS INFORMATION DELIVERY PROGRAM *
21
IMPLEMENT AND ASSESS PERSUASION PROGRAM *
22
IMPLEMENT AND ASSESS ACTION PROGRAM *
23
IMPLEMENT INITIAL (FORMATIVE) EVALUATION
24
DEVELOP AND ASSESS REINFORCEMENT PROGRAM FOR INITIAL ADOPTION *
**
25
DEVELOP AND ASSESS REINFORCE-MENT PROGRAM FOR MAINTAINING ADOPTION *
**
26
IMPLEMENT TERMINAL (SUMMATIVE) EVALUATION *
27
REPORT TO TARGET AND CLIENT POPULATIONS *
28
DOCUMENT A DISSEMINATE RESULTS OF TERMINAL EVALUATION

DESCRIPTION OF FADS MODEL



Description

In most cases, the client will seek out the agent and request his services. The agent should begin to develop a rapport with the client that can be maintained over time. At this time the agent should try to determine the client's relationship to the user system and begin the process of examining the general nature of the perceived.

Process

1. The agent will develop rapport with client.
2. The agent will identify the role of the client in the user system.
3. The agent will elicit from the client statements describing the nature of the perceived difficulty.
4. The agent will describe to the client specific services offered, methods employed, and options for decision-making inherent in the operation of the model.
5. The client will decide (initially) whether agent's service can be of use to the client.

Output

1. Statement of client's role in the user system.
2. Statement of client's initial perceived difficulty.
3. Statement of the nature of continued services desired by client.

1
IDENTIFY CLIENT AND ESTABLISH RELATIONSHIP *
2
IDENTIFY CLIENT'S PERCEPTIONS OF PRESENT AND IDEAL STATUS *
3
ACHIEVE CONSENSUS BY CLIENT GROUP ON PRESENT AND IDEAL STATUS *

Description

Generally, the client will be motivated by his perception of a negative or problem situation which exists either within his direct environment, or as a part of a larger user system.

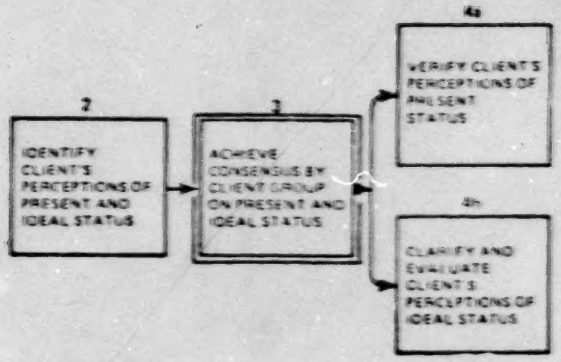
This general perception must be explored in order to identify its component parts. In addition, the client will possess some impressions about the ideal situation (status); but since these impressions are often implicit, they must be identified and formalized by the agent.

Process

1. The agent will interact with client regarding nature of present status.
2. The agent will identify information needed to formulate a detailed description of client's perception of present status.
3. The agent will interact with client regarding the description of ideal status.
4. The agent will identify information needed to formulate a detailed description of client's perception of ideal status.
5. Initial discussion of, or creation of a formal statement of organizational goals and objectives by agent and client.
6. The client will develop an organizational chart of the user system, identifying formal relationships.
7. The agent will determine if client is representing a group.
8. The client will identify members of client group, if it exists.
9. The agent will develop preliminary agreement concerning nature of continued agent services desired through additional model elements.

Output

1. Statement update detailing present status as perceived by client.
2. Statement presented to the client identifying information needed to formulate a detailed description of client's perceptions of present status.
3. Statement update detailing ideal status as perceived by client.
4. Statement presented to the client identifying information needed to formulate a detailed description of ideal status.
5. Statement by client of the formal organizational goals and objectives.
6. Chart identifying organizational structure of the total user system.
7. Statement describing roles of client group members.
8. Statement of agreement between client and agent for services to be rendered through model element 9.


4a
VERIFY CLIENT'S PERCEPTIONS OF PRESENT STATUS
2
IDENTIFY CLIENT'S PERCEPTIONS OF PRESENT AND IDEAL STATUS
3
ACHIEVE CONSENSUS BY CLIENT GROUP ON PRESENT AND IDEAL STATUS
4b
CLARIFY AND EVALUATE CLIENT'S PERCEPTIONS OF IDEAL STATUS

Description

If the client is a representative of a larger client group, the agent should pursue a consensus of opinion from the client group regarding the exact nature of both the present and ideal status. This procedure attempts to avoid errors made as a function of a single client's selective perceptions.

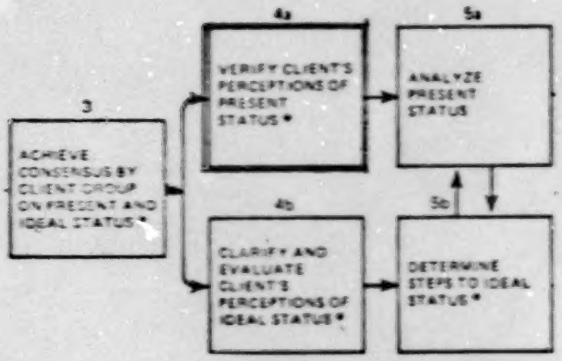
Process

1. The agent will interact with client group regarding nature of present status.
2. The agent will interact with client group regarding nature of ideal status.
3. The client will achieve consensus regarding present and ideal status.
4. The agent will interact with client group regarding the formal statement of goals and objectives.
5. The client will achieve consensus concerning chart identifying organizational structure of total user system.
6. The agent will identify information needed for verification study.
7. The agent will identify criteria to be used in verification study.
8. The agent will identify information needed to classify and evaluate client's perception of ideal status.
9. The agent will identify criteria needed to classify and evaluate client's perception of ideal status.

Output

1. Statement of client group's consensus of present status.
2. Statement of client group's consensus of ideal status.
3. Statement of client group's consensus regarding the goals and objectives of the organization.
4. Statement of client group's consensus of chart identifying organizational structure of total user system.
5. Statement presented to client describing information needed for verification study.

6. Statement presented to client describing criteria to be used in verification study.
7. Statement presented to client describing information needed to classify and evaluate client's perceptions of ideal status.
8. Statement presented to client describing criteria needed to classify and evaluate client's perceptions of ideal status.



Description

Subsequent to the client's statement of the perceived present status, the agent should initiate an independent estimate (verification) of the present status. Implemented on a small scale, perhaps even unobtrusively, this verification process should either support or deny the initial perceptions of the client.

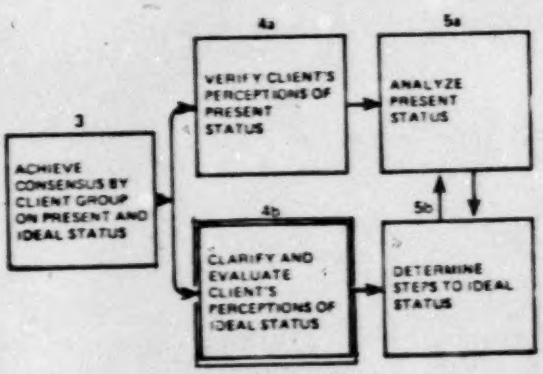
Process

1. The agent will revise sources of information used by client in determining his perceptions of present status as necessary.
2. The agent will collect and analyze information needed to verify present status.
3. The agent will summarize agent's analysis of present status, including differences between agent's findings and client's perceptions of present status.
4. The agent will present results of verification analysis to the client.
5. The agent will develop through client/agent interaction, a mutually acceptable statement of client's perception.
6. The agent will determine procedures necessary to conduct full study of present status.
7. The agent will identify total resources needed (if any) for effective implementation of full present status study.

8. The agent will analyze readiness of client organization to proceed with full scale status study, revising agreement to continue agent's services through model element 6 as necessary.

Output

1. Statement presented to the client of agent's verification of client's perceptions of present status.
2. Statement presented to the client describing perception of present status agreed upon by agent and client.
3. Statement presented to the client outlining procedures of present status study and sources of data needed.
4. Statement presented to the client identifying total resources required (if any) to implement status study.
5. Statement presented to the client assessing user system's readiness for status study.



Description

At this point the agent will describe in detail the client's perceptions of an ideal status. In some instances, this process involves only the refining and formalizing of perceptions stated in elements 2 and 3. However, at times, the client may not have developed an actual ideal status description. The agent will then help the client develop an ideal status description that is functional. This statement may need to be changed as new information is assimilated, such as irreconcilable discrepancies between the ideal and present status, unforseen par meters placed on solutions, or any substantive organizational change.

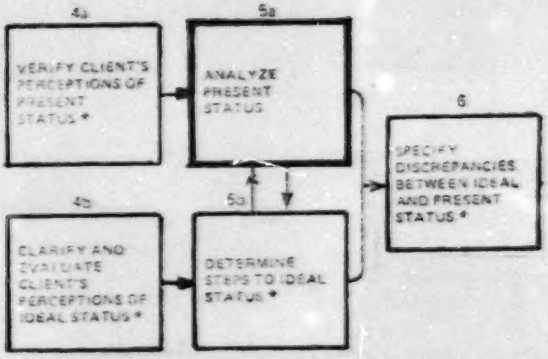
Process

1. The agent will revise as necessary sources of information used by client in determining his perceptions of the ideal status.

2. The agent will revise criteria as necessary for clarification and evaluation of ideal status.
3. The agent will procure information needed to determine ideal status.
4. The agent will analyze data related to ideal status.
5. The agent will present ideal status verification analysis to client.
6. The agent will interact with client regarding ideal status based on data.
7. The agent will interact with client regarding suggestions for alterations to be made in client's perceptions of ideal status if necessary.
8. The agent will develop a statement to support or alter statement of client's perceptions of ideal status, as required.
9. The agent will develop, through client/agent interaction, the final criteria for evaluating the ideal status.
10. The agent will apply evaluation criteria to ideal status.
11. The agent will determine procedures necessary to identify steps to achieve ideal status.
12. The agent will identify resources needed (if any) for effective determination of steps to ideal status.

Output

1. Statement presented to the client describing the sources of information used by client in determining his perceptions of the ideal status.
2. Statement presented to the client describing final criteria used in clarifying client's perceptions of ideal status.
3. Statement presented to the client describing criteria used in evaluating client's perceptions of ideal status.
4. Statement regarding ideal status that is acceptable to both client and agent.
5. Statement specifying procedures to determine steps to ideal status and sources of data needed.
6. Statement of total resources required (if any) to implement study of steps to attain ideal status.



Description

In order to specify the discrepancies (element 6) that exist between the present and ideal status, the agent must collect detailed information about the nature of the present status. Data appropriate for this analysis may be derived from formal and informal sources. Examples of formal sources are statement of organizational goals and objectives, program analysis, activity descriptions and effectiveness-ratings; examples of informal sources are communication patterns, managerial credibility, and organizational morale. Additional information needs may be identified following the analysis of the steps leading to the ideal status.

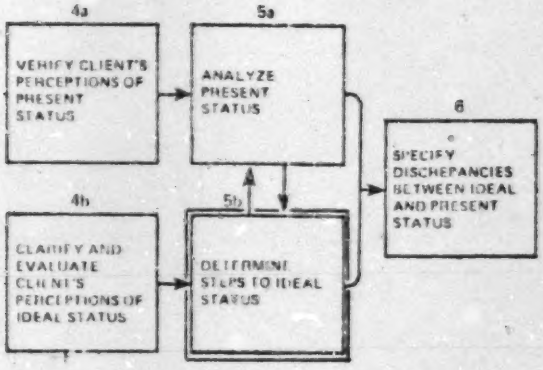
Process

1. The agent will interact with the client regarding the best plan for implementating the present status study.
2. The agent will develop the criteria to be used in the status assessment.
3. The agent will design detailed procedures and instrumentation for status assessment based upon, but not limited to, the following:
   a. nature of assessment population;
   b. client expectation;
   c. search of existing literature;
   d. other available resources.
4. The agent will present the client with the final plan for the present status study.
5. The client will identify organizational programs and activities.
6. The agent will analyze the efficiency and effectiveness of existing programs designed to meet stated goals and objectives.
7. The agent will collect the data specified in the outline of the status study.

8. The agent will assess attitudes of the assessment population regarding present status.
9. The agent will collect information from the target population relevant to, but not restricted to, the following systems variables:
   a. general attitude toward change;
   b. social characteristics;
   c. perceived need for change;
   d. tolerance for deviancy;
   e. general communication integration;
   f. systems norms.
10. The agent will synthesize existing data relevant to the organization's goals and objectives.
11. The agent will present the client with the results of the present status study.
12. The agent and client will identify parameters of possible target population(s).
13. The agent will gather additional information needed for preliminary determination of the steps to the ideal status.

Output

1. Statement presented to the client describing the design and the administration procedures of the present status assessment.
2. Statement presented to the client identifying the criteria used in the present status' evaluation.
3. Statement presented to the client describing the instrumentation package which includes any newly developed instruments prepared in response to particular assessment problems and/or existing instruments validated for the present study.
4. Statement of the organization's programs and activities.
5. Statement presented to the client evaluating the efficiency and effectiveness of the existing program's potential to meet the organization's stated goals and objectives.
6. Statement presented to the client assessing the attitudes of the assessment population(s) regarding the present status.
7. Statement regarding the present overall status of the formal and informal systems of the organization.
8. Statement presented to the client describing the agent's assessment of the ability of the organization to achieve its stated goals and objectives.
9. Statement identifying the parameters of possible target populations.
10. Statement presented to the client identifying additional information needed for preliminary determination of steps to ideal status.



Description

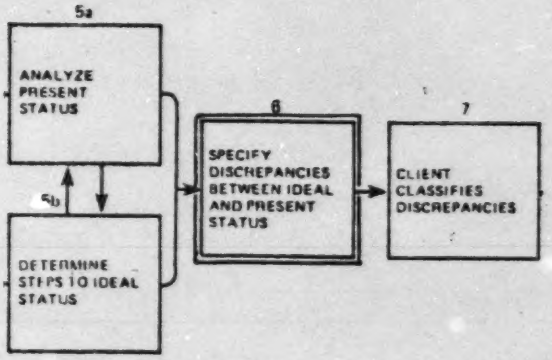
In step 4b, the client and agent agreed upon a detailed statement of the ideal status. The agent should now determine those states antecedent to the ideal status. The alternative methods for deriving these interim states will be listed in the solution-identification step (element 8).

Process

1. The agent will revise the statement of acceptable evidence and/or criteria for identifying the ideal state.
2. The agent will identify and collect any information pertinent to the identification of the steps to attain the ideal status.
3. The agent will summarize the information collected to describe the steps to attain the ideal status.
4. The agent will develop procedures for analyzing the discrepancies between ideal status and present status.
5. The agent will present to the client the procedures for analyzing the discrepancies between the ideal status and the present status.
6. The agent will identify and collect any additional information needed for the discrepancy analysis.

Output

1. Statement presented to the client describing additional information needed to determine the steps to attain the ideal status.
2. Statement presented to the client specifying the revised criteria for identifying ideal state.
3. Statement acceptable to the client describing the steps to attain the ideal status.
4. Statement presented to the client describing the procedures for the discrepancy analysis.
5. Statement presented to the client of additional information needed to complete the discrepancy analysis.



Description

Based upon the information gained from studies of the present and ideal status (elements 5a and 5b), the agent will identify the discrepancies between the ideal and the present status, and their magnitude. At this point, initial discussion of the feasibility of resolving the discrepancies should begin. If the differences are overwhelming, the client may terminate the contract or choose to re-evaluate his ideal status. If not, the reconciliation of any difference(s) becomes the primary goal of both the agent and the client.

Process

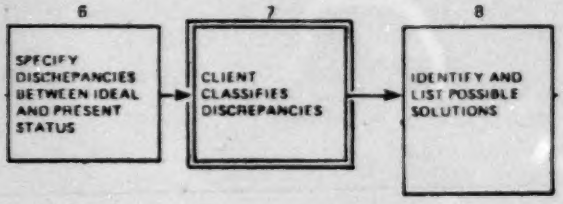
1. The agent will develop criteria for determining the discrepancies between the present and ideal status.
2. The agent will finalize procedures for conducting the discrepancy analysis.
3. The agent will specify the discrepancies between the present status and ideal status.
4. The agent will assess the awareness and attitudes of the client and the target population(s) toward the identified discrepancies.
5. The agent will assess the ability and willingness of the target population to respond to a program designed to eliminate the identified discrepancies.
6. The agent will interact with the client concerning the identified discrepancies and revise the statement of the ideal status as necessary.

Output

1. Statement presented to the client describing the criteria and procedures used in determining the discrepancies between the present status and ideal status.
2. Statement presented to the client specifying the discrepancies between the present status and ideal status, using the following format:

Problem/Present Status/Ideal Status/Discrepancy

3. Statement presented to the client regarding the client's and target population's awareness of, and attitudes toward, the identified discrepancies.
4. Statement presented to the client describing agent's assessment of the target population's willingness and ability to respond favorably to a program designed to eliminate discrepancies.
5. Decision by the client to modify or accept the statement of ideal status.
6. Statement of the agreement between agent and client for services to be rendered through element 11.



Description

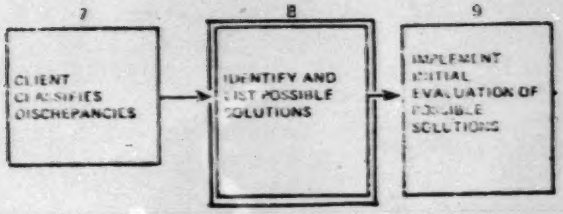
Once the discrepancies have been specified, the client will classify them according to their importance to him, the client group, and the target population. The rationale for this classification is based on the need for efficiency in the detailed examination of solutions. For the client to move through the model efficiently, he should be able to identify the problems that he feels are most pressing. The client will classify the discrepancies as: a) very important, b) important, or c) not very important. The criteria for the classification should be derived by the client with the assistance of the agent, if necessary.

Process

1. The agent will present the discrepancies to the client using the following format:
   Problem/Present Status/Ideal Status/Discrepancy
2. The client, through interaction with the agent, will develop the criteria to be used in the classification process.
3. The client will apply the classification criteria to the specified discrepancies.

Output

1. Statement of the criteria for the classification of the discrepancies developed through client/agent interaction.
2. Statement of the discrepancies by classification.



Description

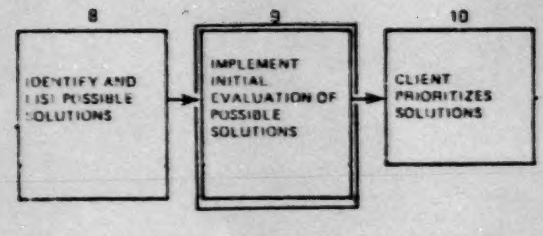
The agent must now begin the process of identifying possible solutions to the problems identified through the discrepancy analysis. Although each problem or set of problems will suggest a unique solution-identification process, all of these processes will involve the use of various sources of information. Easy access to centralized collections of relevant material (ERIC) and personal expertise (consultants) will prove invaluable. In addition, the agent and client may find that the target population is another valuable resource of information concerning the problem and its solution.

Process

1. The agent and client will develop criteria for the identification of solutions.
2. The agent will develop a procedure for solution identification with the help of the client, if requested.
3. The agent will determine the kinds of information needed to identify possible solutions.
4. The agent will identify and contact sources of information needed to identify possible solutions.
5. The agent will identify all possible solutions.

Output

1. Statement presented to the client describing procedures and criteria used in solution identification.
2. Statement presented to the client describing the sources of knowledge/information identified and contacted, and the information gained.
3. Statement presented to the client identifying all possible solutions. (This statement will be presented in the following format: Problem/Discrepancy/Data/Solution.)



Description

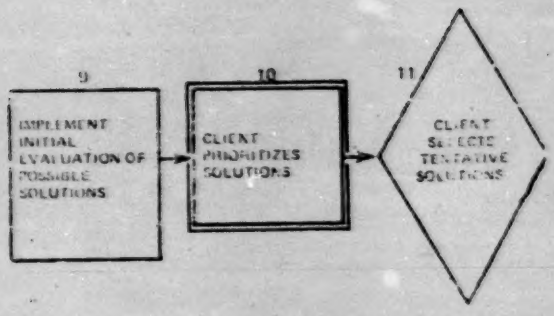
The agent must now provide the client with an initial evaluation of the possible solutions that have been identified. This cursory evaluation will form the data base from which the client will select those tentative solutions which merit more complete analysis and evaluation. The information gathered in the analysis of the present status (element 5) will be the basis of the formulation of this initial evaluation of solutions. Once again, the target population could prove to be a valuable resource of information to improve the completness and accuracy of the information used in the evaluation.

Process

1. The agent, through interaction with the client, will develop the criteria by which the possible solutions will be initially evaluated.
2. The agent will synthesize the information collected in the study of the present status.
3. The agent will apply the evaluation criteria to the possible solutions.
4. The agent will present an evaluation of each possible solution to the client using the following format:
   Problem/Discrepancy/Data/Solution/Evaluation
5. The agent will interact with members of the target population regarding the evaluations of solutions and the process used to evaluate solutions.

Output

1. Statement presented to the client describing the criteria used in evaluation of the possible solutions.
2. Statement presented to the client of the initial evaluation of each of the possible solutions.
3. Statement presented to the client describing the agent's assessment of the target population's attitudes toward the evaluations, and the evaluation process.



Description

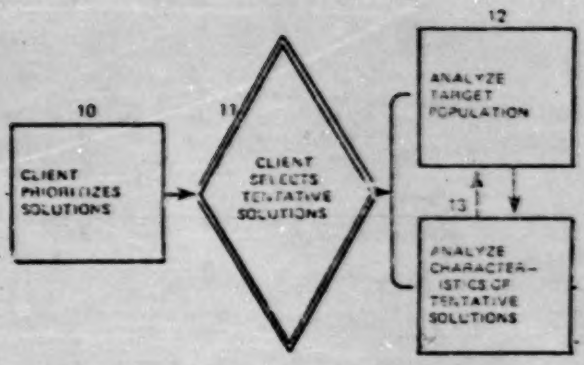
The client is now faced with the task of prioritizing the solutions presented to him by the agent. He may use a number of criteria, including: solutions to problems that need immediate attention; solutions that are easiest to implement; and solutions that constitute costs that are most reasonable. These and other criteria may be used alone or in combination.

Process

1. The agent will present the solutions to the client using the following format:
   Problem/Discrepancies/Data/Solution/Evaluation
2. The client will develop criteria (with the assistance of the agent, if necessary) to be used in prioritizing solutions.
3. The client will apply criteria and prioritize solutions.

Output

1. Statement of criteria used by client in prioritizing the possible solutions.
2. List of prioritized solutions created by client.



Description

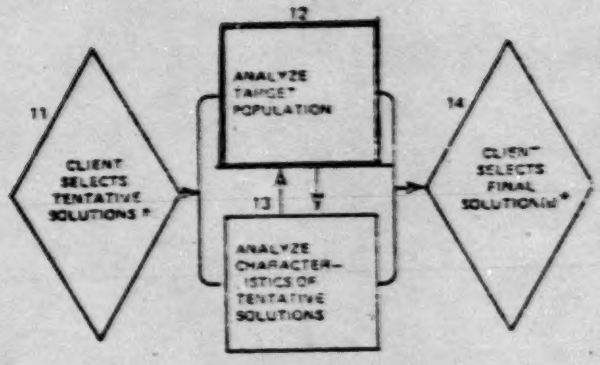
Utilizing the evaluations provided by the agent, and based on his list of solutions by priority, the client selects those solutions that he feels merit more thorough examination and evaluation. The agent will assist the client, if necessary, in developing the criteria used for selection. The final decision is made by the client.

Process

1. The client will develop, with the assistance of the agent, criteria to be used in selecting tentative solutions.
2. The client will select the tentative solutions.
3. The client and agent will negotiate the continued use of the agent up through element 14.

Output

1. Statement describing the criteria used by the client in the selection of the tentative solutions.
2. Statement of the tentative solutions selected by the client.
3. Statement of the agreement between agent and client for services to be rendered through element 14.



Description

The agent is now required to analyze the target population with regard to the list of tentative solutions. The data to be collected will include information pertaining to both the formal and informal systems of the client's organization as they relate to the tentative solutions. The outcome of this analysis will be an additional, more extensive evaluation of the solution. This evaluation will be used both in selecting the final solution, and in designing and implementing the diffusion component of the model.

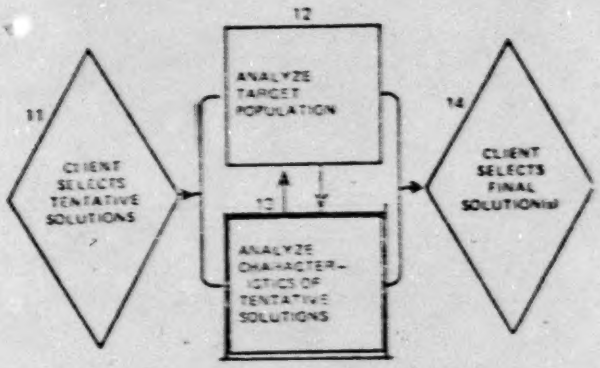
Process

1. The agent will synthesize previously gathered data.
2. The agent will identify additional information as needed.
3. The agent will develop criteria for evaluating the ability and willingness of target population to accept and implement selected solutions.
4. The agent will assess the ability and willingness of the target population to accept and implement the tentative solutions.
5. The agent will identify the major reinforcers in the target population.
6. The agent will identify and list possible legitimizers for each of the tentative solutions.
7. The agent will identify opinion leaders, gatekeepers, and resistors for each of the tentative solutions.
8. The agent will estimate the basic costs to be encountered in the implementation of each of the tentative solutions.

Output

1. Statement presented to the client identifying the information used in the analysis of the target population.
2. Statement presented to the client describing criteria for evaluating the ability and willingness of the target population to accept and implement each tentative solution.

3. Statement presented to the client listing the legitimizers reinforcers, gatekeepers, opinion leaders, and resistors for each tentative solution.
4. Statement presented to the client assessing the ability of the target population to accept and implement the selected solutions.
5. Statement presented to the client assessing the willingness of the target population to accept and implement the selected solutions.
6. Statement presented to the client detailing the complete analysis of the target population.
7. Statement presented to the client estimating the costs to be encountered in the implementation of each tentative solution.



Description

The analysis of the characteristics of the tentative solutions will be conducted simultaneously with the analysis of the target population. Predictably, these two processes interact with each other. As a major part of the process involved in element 13, the agent will examine the selected tentative solutions and assess their potential for successful implementation (e.g. diffusion). The criteria used will include, but not be limited to, the following characteristics: a) relative advantage for the target population; b) compatibility with existing norms and values; c) conceptual simplicity (i.e., ease of understanding); d) ability to be implemented on a trial basis; and e) observability of results. Using these and other criteria, each tentative solution will be evaluated to assess its potential for successful implementation.

Process

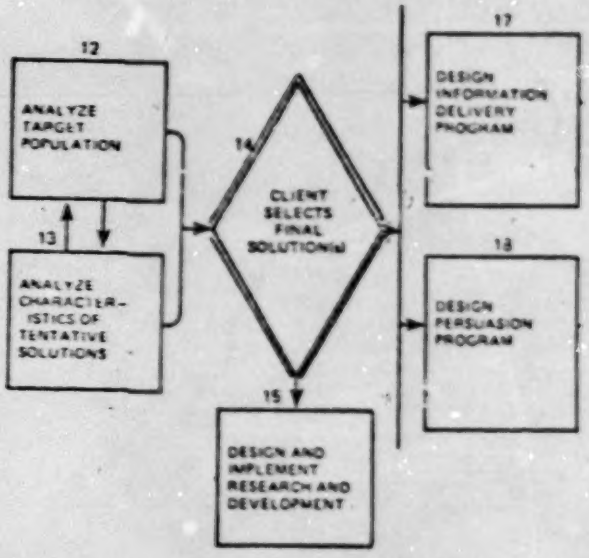
1. The agent will develop the criteria to be used in the assessment of the characteristics and potential success of the tentative solutions.
2. The agent will develop the procedures to be used in

assessing the characteristics and potential success of the tentative solutions.

3. The agent will identify the information needed to assess the characteristics and potential success of the tentative solutions, based on specified criteria.
4. The agent will apply the "success" criteria to the selected tentative solutions.

Output

1. Statement presented to the client regarding the agent's assessment of the characteristics and potential success of each of the tentative solutions.
2. Statement presented to the client specifying the procedures and criteria used in assessing the potential success of the tentative solutions.
3. Statement presented to the client describing the information used in the assessment procedure.



Description

The client will now decide on the final solution(s) he wishes to pursue. There are three alternatives open to him. First, he can select an existing solution(s) and work with the agent to diffuse the solution throughout his organization. (This diffusion option will also be the final outcome of the second and third alternatives.) Second, he may elect to adapt existing materials or resources which will then be diffused. Third, he may elect to enter into research or development projects to provide him with solutions that do not exist at present. If the third alternative were selected, implemented and completed, the client would then enter into the model again at element 8a.

Process

1. The client will develop, with the assistance of the agent, if desired, the criteria to be used in selecting the final solution(s).
2. The client will select the final solution(s).
3. The agent and client will negotiate agent services through element 19.

Output

1. Statement describing the criteria used in selection of the final solution.
2. Decision by client to:
   a. adopt available solution;
   b. adapt available solution;
   c. implement research and/or development projects.
3. Statement of the agreement between agent and client for services to be rendered through element 19.

Description

The client has selected the research of development option. He may assume the burden of this research himself or contract with an outside organization (perhaps even the agent) to design and implement it. He may also seek external support for this effort. The results or products provided through research or development are then identified as possible solutions, and the process of evaluation and selection is re-initiated.

Process

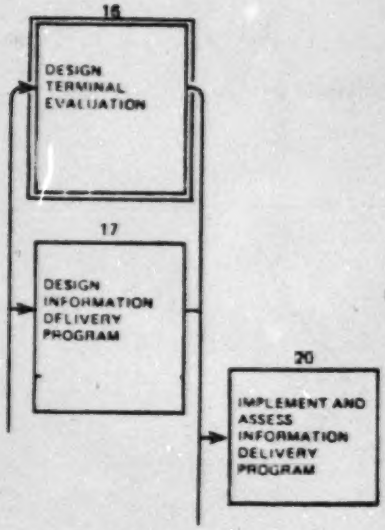
1. Define problem and its rationale.
2. Determine research or development procedures.
3. Conduct research or development activities.
4. Analyze data and determine findings.

5. Prepare report on research of development activities.

Output

1. Statement of rationale for problem, procedures to implement or for study, and results on product(s) developed. (Results or products are then entered into element 8 as a possible solution(s).)

NOTE: This element represents a very complex system of a scientific nature, only a part of which is shown here.



Description

The agent is accountable to the client for the success of the overall diffusion strategy. Accordingly, the agent must be able to implement an evaluation process at the conclusion of the diffusion program. The terminal evaluation will include assessment of the efficiency and the effectiveness of the diffusion program, and the consequences for the user system resulting from the implementation of the solution. In addition, the agent will need formative evaluations of the program's impact throughout the diffusion process to aid in making decisions pertinent to the program's implementation.

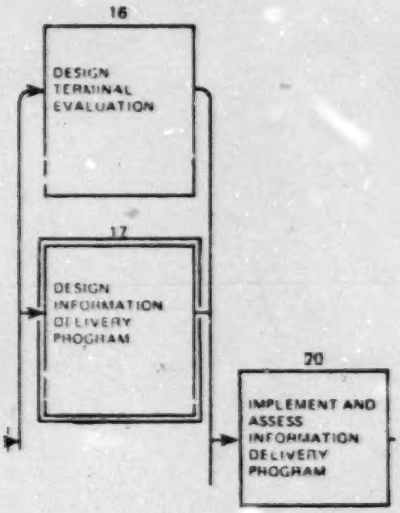
Process

1. The agent will develop criteria for the diffusion program's success.
2. The agent will identify all instrumentation needed for formative and summative evaluations.

3. The agent will interact with the client concerning the proposed design for terminal evaluation.

Output

1. Statement presented to the client specifying the criteria for the diffusion program's success.
2. Statement presented to the client describing the procedures to be used in assessing the diffusion program's success.
3. Statement presented to the client describing the instruments to be used for the formative and summative evaluation.



Description

The primary step of the diffusion process is the presentation of information about the innovation (solution). That is, the target population must be made aware of the existence of the solution and acquainted with its advantages. The selection of the most effective communication strategies and their efficient implementation is a very crucial task in the diffusion program.

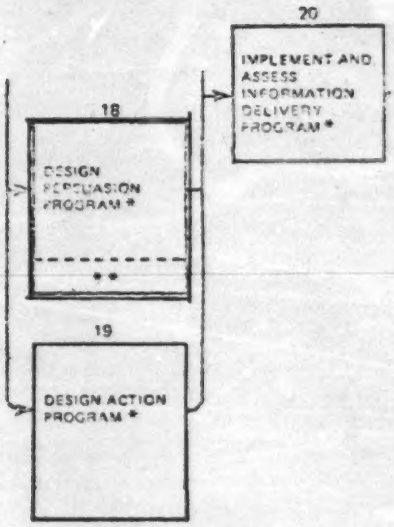
Process

1. The agent will develop criteria for the delivery system's success.
2. The agent will develop the instruments and procedures necessary for assessing the success of the information delivery program.
3. The agent will identify and evaluate the available communication resources.
4. The agent will identify and select those communication resources most relevant to each of the awareness steps.
5. The agent will design messages compatible with the needs of both the client and the target population.
6. The agent will identify the information delivery program's reinforcers.

7. The agent will interact with the client regarding the proposed design for the information.
8. The agent will estimate the amount of time needed to complete the information delivery program.
9. The agent will develop procedures for field testing the information delivery program.
10. The agent will implement the field testing of the information delivery program.
11. The agent will adopt the information delivery program according to the results of the field testing.

Output

1. Statement presented to the client describing the criteria for evaluation of the relative impact and efficiency of each of the communication strategies employed.
2. Statement presented to the client identifying and evaluating the available communication resources.
3. Statement presented to the client describing the instrumentation and procedures to be used in evaluating the information delivery program.
4. Statement presented to the client describing the communication channels, messages, and procedures to be used in the information delivery program.
5. Statement presented to the client identifying the information delivery program's reinforcers.
6. Statement presented to the client estimating the amount of time needed to complete the information delivery program.
7. Statement presented to the client outlining the procedures used, and results of the field testing.
8. Statement presented to the client indicating the changes made (if any) in the information delivery programs as a result of the field testing.



Description

After raising the awareness level of the target population, the agent begins a systematic program of persuasion. The identification of the opinion leaders and their relationships with the various members of the target population have been determined previously. The agent is now concerned with designing a model of interpersonal persuasion that will be effective for the target population, and compatible with the information and action programs.

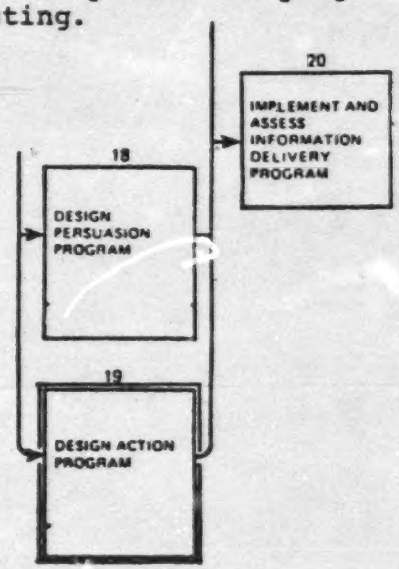
Process

1. The agent will describe the target population's use of the available interpersonal communication channels.
2. The agent will assess the additional information needs perceived by the opinion leaders.
3. The agent will identify the interpersonal communication strategies to be used in contact with opinion leaders and legitimizers.
4. The agent will identify the procedures and instruments to be used in assessing the persuasion program.
5. The agent will select the persuasion model best suited to the specific target population.
6. The agent will achieve the client's agreement regarding the persuasion model's selection.
7. The agent will design procedures for field testing the persuasion program.
8. The agent will field test the persuasion program.
9. The agent will adapt the persuasion program as necessary, based on the results of the field testing.

Output

1. Statement presented to the client describing the target population's use of available communication channels.

2. Statement presented to the client listing the opinion leaders and their information needs (if any).
3. Statement presented to the client describing the interpersonal communication strategies to be used in contacting the opinion leaders and legitimizers.
4. Statement presented to the client describing the persuasion model to be applied in the persuasion program.
5. Statement of the client agreement to accept the persuasion model presented or an agreed upon alternative.
6. Statement presented to the client identifying the relevant reinforcers used in the persuasion program.
7. Statement presented to the client describing the procedures and instruments to be used in assessing the persuasion program.
8. Statement presented to the client describing the procedures used in field testing the persuasion program.
9. Statement presented to the client indicating the changes (if any) made in the persuasion program based on the results of the field testing.



Description

For some selected solutions there may be the need for the target population to develop certain skills before adoption can take place. Although the members of the target population are aware of the existence of the solution, and are disposed toward its adoption, they may be unable to implement the solution because they lack the necessary skill. In such cases, the agent must assess those competencies that are relevant to the adoption of the solution and provide persons lacking the necessary levels of competencies with a systematic program of instruction designed to increase those competencies to an acceptable level of mastery. Interaction with the target population at this time may avoid costly errors in misguided or irrelevant instruction.

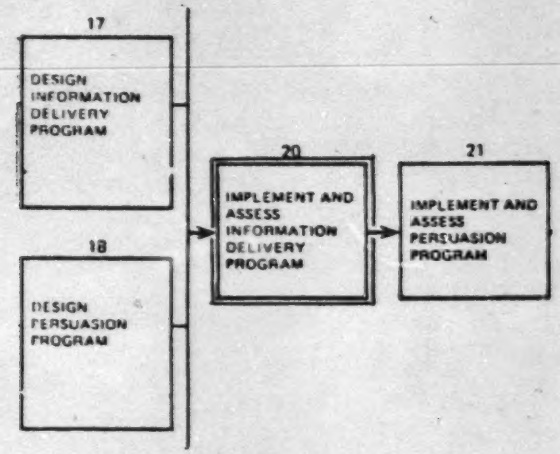
Process

1. The agent will specify those skills needed by the target population to adopt the selected solutions.
2. The agent will assess the competency of the target population relevant to the skills needed for adoption of the solution and identify the pertinent training needs.
3. The agent will design instructional strategies that will raise the skill competency of the target population to the level needed for successful adoption.
4. The agent will select the needed instructional resources from those that are available to him to do the specified training.
5. The agent will select criterion measures of task proficiency.
6. The agent will identify the procedures and instrumentation needed to assess the action program.
7. The agent will interact with the client on the design of the action program.
8. The agent will identify the relevant reinforcers in the action program.
9. The client and agent will negotiate the continued use of the agent up through element 27.
10. The agent will design the procedures to be used in field testing the action program.
11. The agent will implement the field test of the action program.
12. The agent will adapt the action program, if necessary, on the basis of the results of the field testing.

Output

1. Statement presented to the client specifying the necessary skills (and level) needed for adoption of the solution.
2. Statement presented to the client assessing the competency level and training needs of the target population.
3. Statement presented to the client stating the instructional strategies and resources required for use in the action program.
4. Statement presented to the client describing the criterion measures of task proficiency.
5. Statement presented to the client identifying the relevant reirnforcers used in the action program.
6. Statement presented to the client identifying the procedures and instruments needed to assess the action program.
7. Statement presented to the client describing the final design of the action program.
8. Statement of the agreement between agent and client for services to be rendered through element 27.
9. Statement presented to the client describing the procedures used in field testing the action program.

10. Statement presented to the client indicating the changes (if any) in the action program based on the results of the field testing.



Description

This element is the first in a series of three implementation steps. Based on the selected solution, the diffusion process and its evaluation procedures have been designed previously. The agent will now begin to raise the target population's awareness of the solution through a systematic process of information dissemination. While the summative evaluation of the effectiveness of this operation will be measured in terms of initial adoption, the agent will also conduct formative assessments of the program's effectiveness and efficiency. These formative assessments will be valuable to the agent during the implementation of the Persuasion Program and Action Program.

Process

1. Agent will identify and organize the information dissemination resources that are available to him.
2. The agent will transmit the previously designed messages, using the appropriate communication channels.
3. The agent will apply the pre-set evaluation criteria to the assessment data collected from the target population.
4. The agent will refine and implement the procedures and instrumentation for assessment of the information delivery program.
5. The agent will assess the efficiency and effectiveness of the messages, using a representative sample of the target population.

6. The agent will, based on relevant data, revise and adapt the information delivery program.
7. The agent will interact with the client on a regular basis to keep him informed concerning the progress of the information delivery program.

Output

1. Statement presented to the client specifying the information dissemination resources identified and utilized by the client.
2. Statement presented to the client evaluating the efficiency and effectiveness of the information delivery system.
3. Statement presented to the client describing the revisions and adaptions for the information delivery program.

Description

Following the identification of the model of persuasion to be used, the agent implements that model. This procedure includes the process of establishing interpersonal relationships between the agent and the opinion leaders, evaluating the persuasion model, and revising it, if necessary.

Process

1. The agent will contact opinion leaders.
2. The agent will establish relationships with opinion leaders.
3. The agent will assess the applicability of the persuasion model to the target population.
4. The agent will assess the efficiency of the persuasion program.
5. The agent will make revisions and adaptations of the persuasion program based upon the information derived from the evaluation process.
6. The agent will interact with the client on a regular basis to keep him informed about the progress of the persuasion program.

Output

1. Statement assessing the relationship established with the opinion leaders and legitimizers.
2. Statement presented to the client evaluating the overall applicability and efficiency of the persuasion model.
3. Statement presented to the client describing the revisions and adaptations made in the persuasion program.

Description

In the implementation of the action program, the agent will develop and assess the instructional program that is needed to raise the skill level of the target population to the level of mastery required for the solution's adoption. Previously, the agent determined the skills necessary for adoption, assessed the skill level of the target population, specified their training needs and designed the necessary instructional strategies to achieve mastery levels. He will now motivate the target population to learn the new skills, field test and evaluate the strategies and criterion measures, and implement the system. In addition, the agent is responsible for monitoring the learning of the target population, and using those data to make revisions and adaptions in the program as required.

Process

1. The agent will develop a plan for motivating the target population to learn the necessary skills to adopt the solution.
2. The agent will develop the procedures to be used in the field testing and the evaluation of the instructional program and the criterion measures.
3. The agent will develop the procedures for monitoring (formative evaluation) the learning of skills by the target population.
4. The agent will initiate an evaluation of the instructional program and assess its efficiency.

5. The agent will determine the percentage of the target population reaching the criterion level of the task's proficiency.
6. The agent will revise and adapt the instructional program on the basis of its evaluation.
7. The agent will interact with the client on a regular basis to keep him informed about the progress of the action program.

Output

1. Statement presented to the client assessing the agent's plan for the target population motivation to learn specified skills.
2. Statement presented to the client describing the procedures used in the field testing and initial evaluation of the instructional program and criterion measures.
3. Statement presented to the client specifying the procedures used in monitoring the learning progress of the target population.
4. Statement presented to the client regarding the percentage of the target population reaching the criterion level of the task's proficiency.
5. Statement presented to the client assessing the efficiency of the instructional program.
6. Statement presented to the client describing revisions and adaption made in the action program by the agent subsequent to the evaluation of the instructional program.

Description

At this time, the agent will implement the first evaluation program. This program will focus on the assessment of the rate of the solution's adoption by the target population (i.e., the percentage of the population that has implemented the solution.) At this time, the agent will be able to evaluate the initial effectiveness of the information delivery, persuasion, and action programs as a total strategy.

Process

1. The agent will develop criteria to be used in identifying the adoption of the solution by a member of the target population.
2. The agent will evaluate the instruments and procedures to be used in assessing the degree of adoption.
3. The agent will observe the target population in order to identify and evaluate adoption/rejection.
4. The agent will revise or adapt the formative evaluation program, based upon the evaluation of the instruments and procedures used in the initial evaluation program.
5. The agent will interact with the client on a regular basis and keep him informed concerning the progress of the initial evaluation program.

Output

1. Statement presented to the client assessing the rate of adoption/rejection.
2. Statement presented to the client describing the criteria used in assessing the adoption of the solution.
3. Statement presented to the client evaluating the procedures and instruments used in the initial evaluation program.
4. Statement presented to the client describing revisions and adaptations in the initial evaluation program.

Description

The agent is concerned with the immediate adoption of the solution as well as with its continued use over time. The information, persuasion and action strategies used prior to adoption must be reviewed and revised as necessary. Perhaps the most important aspects of this process is the identification of the weaknesses in these programs and the identification of the relevant reinforcers.

Process

1. The agent will develop success criteria for the reinforcement program.
2. The agent will develop procedures and instrumentation needed for assessment of the reinforcement program.
3. The agent will identify key behaviors of acceptable adoptors.
4. The agent will synthesize results from all previous formative evaluations.
5. The agent will review the specific impact of the information delivery system and the persuasion program.
6. The agent will identify relevant reinforcers through interaction with the client and the target population.
7. The agent will analyze the results of formative evaluation for areas of the diffusion program's weaknesses.
8. The agent will develop procedures to strengthen areas of weakness.
9. The agent will design and implement the reinforcement program for acceptable adopter behaviors.
10. The agent will revise or adopt the initial adaption reinforcement program based upon the evaluation of that program.
11. The agent will interact with the client on a regular basis to keep him informed concerning the design and implementation of the reinforcement program for initial adoption.

Output

1. Statement presented to the client describing the success criteria for the reinforcement program.
2. Statement presented to the client describing the procedures and instrumentation needed to assess the reinforcement program.
3. Statement presented to the client describing the design for the reinforcement program for initial adoption.
4. Statement presented to the client describing key behaviors of acceptable adopters.
5. Statement presented to the client identifying weakness in the information, persuasion and action programs.
6. Statement presented to the client describing procedures to be used to strengthen weaknesses in information, persuasion and action programs.
7. Statement presented to the client identifying the relevant reinforcers for the initial adoption's reinforcement program.
8. Statement presented to the client assessing the reinforcement program for initial adoption.
9. Statement presented to the client describing the revisions and adaptations of the reinforcement program.

Description

As mentioned previously, the agent is responsible for not only the initial adoption of the solution, but also the maintenance of that adoption over time. Once again, the communication, persuasion, and action programs preceding the initial adoption should be reviewed, changed, and strengthened. The target population should be consulted at this time to help identify the relevent reinforcers to be used in maintaining the adoption by the target population.

Process

1. The agent will determine criteria for the reinforcement program's success to maintain adoption.
2. The agent will synthesize the results from previous formative evaluations of the information delivery, persuasion, and action programs.
3. The agent will identify key behaviors of acceptable adoption and adoption maintenance.
5. The agent will develop procedures for applying the selected reinforcers to maintain adoption.
6. The agent will initiate the reinforcement program to maintain adoption.
7. The agent will apply success criteria to the results of the reinforcement program to maintain adoption.

Output

1. Statement presented to the client describing the criteria for the reinforcement program's to maintain adoption.
2. Statement presented to the client describing the procedures used in the reinforcement program to maintain adoption.
3. Statement presented to client specifying the acceptable maintenance behaviors.
4. Statement presented to the client identifying the relevant reinforcers used in the reinforcement program to maintain

adoption.
5. Statement presented to the client evaluating the results of the reinforcement program to maintain adoption.

Description

The agent is accountable to the client for the success or failure of the diffusion program. The program is evaluated on such criteria as rate of adoption, degree of adoption, length of continuance, and consequences of the adoption. The adoption of the solution may encourage the client to seek the agent's assistance once again in response to a change in status caused by the adoption. In this case, the process will begin again with element 1.

Process

1. The agent will synthesize all formative evaluation information.
2. The agent will implement summative evaluation procedures designed in element 16.
3. The agent will apply the criteria for diffusion program's success to the results of the summative evaluation.
4. The agent will assess the overall efficiency and effectiveness of the diffusion program in achieving the success criteria for adoption of the solution.
5. The agent will assess the efficiency and effectiveness of the terminal evaluation program.
6. The agent will decide to revise or adapt the procedures, criteria and instrumentation used in the terminal evaluation, based upon his assessment of those procedures, criteria and instrumentation employed.
7. The agent will formulate the final report to the client using the following format:

Formative Summative
Problem/Discrepancy/Data/Solution/Evaluation/Evaluation

Output

1. Statement presented to the client describing the procedures, criteria and instrumentation used in the terminal evaluation.
2. Statement presented to the client assessing the efficiency and effectiveness of the terminal evaluation program.
3. Statement presented to the client describing the revisions and adaptations made in the terminal evaluation program.
4. Statement describing the overall efficiency and effectiveness of the diffusion program.

Description

The agent has one last responsibility to the client. He must give him a detailed account of what services have been provided and what outcomes have resulted. This includes both the results of the evaluation of the diffusion process and the agent's assessment of the consequences to the user system produced by implementing the solution. That is, has the present status changed now that the solution has been implemented? In addition, the agent should prepare a report for the target population.This report would explain to them their role in the FADS process. Finally, the agent should suggest additional services, if any, that might be provided by him to the client.

Process

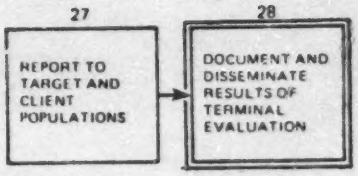
1. The agent will synthesize all information regarding the procedures used in the FADS Model.
2. The agent will develop a chronological report specifying the decision-making process in which the client engaged.
3. The agent will synthesize all data relevant to the formative evaluation process in the FADS Model.
4. The agent will interact with the client regarding the format and content of the reports to be given to the target and client populations.
5. The agent will prepare a report for the target population that will include, but not be limited to, the following:

a. changes in the target population's perceptions of the ideal status,
b. changes in the target population's perceptions of the present status,
c. changes in the social system,
d. changes in the target population's willingness and ability to innovate,
e. changes in the mechanisms for change,
f. consequences of the recent changes for the target population,
g. suggestions of new areas of challenge for the target population, and
h. descriptions of the target population role in the FADS process.

6. The agent will prepare a report for the client and client groups that will include, but not be limited to, the following:
   a. all information found in the report given to the target population,
   b. suggestions regarding the new priorities for the client,
   c. identification and description of possible future problems,
   d. evaluation of the efficiency of the FADS process,
   e. evaluation of the effectiveness of the FADS process,
   f. suggestions for coping with the consequences brought about by the implementation of the new solutions,
   g. suggestions for continued services, if any, to be furnished by the agent,
   h. description of the procedures and instrumentation used in the FADS process, and
   i. summary analyses of the cost/benefits derived from implementing the solution.
7. The agent will develop these two reports in a manner most suitable and functional to the needs of the user system.

Output

1. Statement synthesizing all data relevant to the procedural and evaluational processes of the FADS Model.
2. Statement presented to the target population describing their part in the FADS process, and the changes they can expect as a result of the solution's implementation.
3. Statement presented to the client population summarizing and evaluating the procedures used in the FADS process, describing the consequences of the solution to the user system and suggesting steps to be taken by the client in the future.
4. Statement describing the format and content of the reports for the target and client populations.



Description

The system developed in this proposal relies heavily on the collected knowledge of a number of different fields. This demands a persistent effort on the part of the agent to contribute to relevant bodies of knowledge. Following the terminal evaluation of the project, the agent has at his disposal detailed information regarding a specific organization and its functions, the applicability of a general model of assessment and diffusion, and the evaluation of the effectiveness of the FADS Model itself. It is the agent's responsibility to see that this information becomes available to future researchers, administrators, and consultants by whatever formal and informal means required.

Process

1. The agent will identify available information dissemination vehicles.
2. The agent will design and implement procedures to disseminate information packages on evaluation to existing information dissemination systems.
3. The agent will develop, where needed, new information dissemination vehicles and develop appropriate interface procedures for same.
4. The agent will describe and provide examples of all evaluation instruments and related procedures.
5. The agent will collate evaluation statements into packages relevant to general user audiences (administrators, consultants, etc.).

Output

1. Statement evaluating the FADS model and its organization.
2. Packages of information designed for specific user groups.
3. Statement describing possible procedures for linking information produced with other information dissemination systems.

4. Statement describing new information dissemination vehicles.

SUMMARY

The Model described in the preceding pages represents the results of a deliberate attempt to establish a system designed to "impact" or diffuse research results into the general educational user system in the State of Florida. However, its application is much broader. In a more general context, FADS can be brought to bear on the problems faced by any group, community, or organization. But not before certain additional steps are taken.

Future Activities

At this point in time, the FADS Model should be considered as only partially developed and minimally tested. Thorough literature review, logical analysis, and simulation have been utilized in Model development, but full field testing has yet to be accomplished. A number of further activities should be undertaken if the Model is to become a useful tool in the educational change process. Activity should now be directed toward further development, model improvement, simplification, and effectiveness verification. Only long term efforts will accomplish these goals.

The next step is to implement the Model with several groups that are dealing with "real" problems. At least two groups might be chosen: one that employs a relatively democratic organizational structure and one that utilizes a more autocratic structure. The developers of the Model have been concerned about differences which might emerge within these two types of structures when the Model is implemented.

It would appear that such a full implementation of the Model with a real problem could require as much as 6 to 18 months, depending upon the complexity of the user system and the nature of its problem. These implementations would include not only discussions with the client but also data gathering and analysis activities with the target population and a full set of dissemination and evaluation activities.

The second major activity to be undertaken is the training of other groups to use the Model. This activity could perhaps be done in conjunction with the full implementation of the Model suggested above. It is critical to the developers to identify those portions of the Model which are unclear and/or non-functional in order that the design may be improved and better communicated to others. The major question is whether this is an innovation which can outlive the innovators. This training of other groups (agents) to use the Model would involve the design and development of an agent training program with all necessary procedures and materials.

A number of potential clients have suggested the desirability of developing a simplified FADS process which would contain fewer steps and require less time to implement. While the present Model represents the developers' best effort to represent what is known in the literature about needs assessment and the diffusion process, it is recognized that the Model will require a substantial amount of time to implement and may be difficult to train others to use. Therefore, it seems important to identify the critical components of the Model which might be used as a basis for a short term, mini-model.

Review of the Literature

As was mentioned previously, an element by element review of the literature is being presented on a program sponsored by the Instructional Division. This paper entitled "A Review and Critical Analysis of the Literature Pertaining to Diffusion of Innovations in Education," (William R. Todd, Robert J. Kibler, Norman Dodl, Walter Dick, Stephen Rollin) not only presents the literature relevant to the Model, but also formulates a series of principles and generalizations gleaned from the literature and reflected in the design of the Model. The aforementioned paper provides the empirical support for each of the elements of the Model and will help the reader enormously.

Comments

The authors would appreciate any comments you might have about the FADS Model. Please address your comments and/or questions to:

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